July 15, 2014 1420 East 6th Ave. P.O. Box 200701 Helena, MT 59620-0701

Environmental Quality Council Montana Department of Environmental Quality Montana Department of Fish, Wildlife and Parks

Fisheries Division
Endangered Species Coordinator
Native Species Coordinator - Fisheries
Missoula Office

Montana State Library, Helena

MT Environmental Information Center

Montana Audubon Council

Montana Wildlife Federation

Lewis & Clark Conservation District, 790 Colleen Street, Helena, MT 59601

Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722

Montana River Action, 304 N 18th Ave., Bozeman, MT 59715

U.S. Army Corps of Engineers, Helena

U.S. Fish and Wildlife Service, Helena

State Historic Preservation Office, Helena

Big Blackfoot Chapter of Trout Unlimited, P.O. Box 1, Ovando, MT 59854

U.S. Forest Service, 1569 US Highway 200, Lincoln MT 59639

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program (FFIP). The Program tentatively plans to provide partial funding to a project that would promote and restore habitat in Sauerkraut Creek, a stream severely impacted by historical placer mining operations. The intent of the project is to promote and restore aquatic habitat for salmonids, primarily westslope cutthroat trout and bull trout. Sauerkraut Creek is a tributary to the Blackfoot River located about 5 miles southwest of the town of Lincoln in Lewis and Clark County.

Please submit any comments that you have by 5:00 P.M., August 18, 2014 to Montana Fish, Wildlife and Parks at the address listed above. The funding for this project through the FFIP is contingent upon approval being granted by the Fish and Wildlife Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Michelle McGree, Program Officer Habitat Bureau Fisheries Division

e-mail: mmcgree@mt.gov

ENVIRONMENTAL ASSESSMENT

Fisheries Division Montana Fish, Wildlife & Parks Sauerkraut Creek Phase 2 Channel Restoration

General Purpose: The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that direct Montana Fish, Wildlife & Parks (FWP) to administer a Future Fisheries Improvement Program (FFIP). The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. This legislation was amended again in 2013 to open the program to all native fish species (statute section 87-1-283). The program now calls for the enhancement of native fish through habitat restoration, natural reproduction and reductions in species competition by way of the FFIP.

The FFIP is proposing to provide partial funding to a project calling for rehabilitation of the stream, floodplain, and hillslope in the Sauerkraut Creek drainage. The stream channel and riparian areas would be enhanced by relocating the existing channel and restoring the floodplain, which were heavily impacted by historical placer mining. An existing perched channel, which poses a significant threat to downstream reaches and native fish and mussel populations, would be renovated. The intent of the project is to restore and enhance aquatic habitat and to improve available habitat for westslope cutthroat trout and bull trout populations.

I. <u>Location of Project</u>:

The project site is located on Sauerkraut Creek, a tributary to the Blackfoot River, within Township 13 North, Range 9 West, Section 8 in Lewis and Clark County (Attachment 1). It is located about 5 miles southwest of the town of Lincoln in Lewis and Clark County.

II. <u>Need for the Project</u>:

One goal within FWP's six-year operations plan for the fisheries program is to "protect, maintain, and restore native fish populations, their habitats, life cycles, and genetic diversity to ensure stewardship of native species." By implementing habitat restoration projects through the FFIP, this critical goal can be achieved.

Sauerkraut Creek is a 2nd order tributary to the upper Blackfoot River that supports fluvial, genetically pure westslope cutthroat trout and bull trout populations. The Sauerkraut Creek drainage is the site of several recent restoration projects involving: restoration of 5,000 feet of instream habitat, stream crossing upgrades to restore fish passage to 7 miles of habitat, irrigation improvements including fish screening and water conservation, and grazing management projects. Presently, the upper reaches of Sauerkraut Creek remain highly modified by past mining activities. To accommodate placer mining, the channel was relocated to the toe of the hillslope, and the current stream condition is characterized by long, extended riffles. Large wood and pools are lacking, and existing waste rock tailing deposits confine the channel, resulting in

entrenched channel conditions. The existing perched channel poses a high risk for a major avulsion that could initiate reach scale incision in the project area. The potential avulsion and sediment inputs could be devastating to downstream native fish and western pearlshell mussel populations. The existing perched channel also likely reduces the ability of the aquifer to store and release groundwater during base flow periods, and the altered valley morphology significantly impairs natural riparian and floodplain processes. Additionally, an existing road that is within the floodplain lacks surface drainage, and best management practices and an existing ford has damaged and lowered streambanks, resulting in altered channel morphology and sediment disposition (Attachment 2).

III. Scope of the Project:

This project would involve restoration of 770 feet of Sauerkraut Creek by relocating the existing channel and restoring the floodplain to include riffle-pool and step-pool (B-type) channel morphology developed within a sloping, well-vegetated riparian corridor. Instream habitat complexity will be enhanced through the addition of large woody debris and rock step-pool structures to provide cover and habitat diversity, mechanisms for energy dissipation and pool maintenance. Treatments will involve native materials designed to mimic naturally occurring components of a healthy, functioning, stream channel and floodplain ecosystem. Floodplain treatments will include the use of swales, microtopography, coarse wood, planting and seeding. An existing unimproved, live-water ford crossing will be rehabilitated and approximately 850 feet of road will be ripped, seeded, and rehabilitated with woody debris, transplants, and grass seed (Attachment 3). The total cost for this project is estimated at \$166,680. Of this total, the FFIP would be contributing up to \$34,500. The remaining funds will come from other sources and from in-kind services:

Contributor	In-kind services	In-kind cash					
U.S. Forest Service	\$13,400	\$74,050					
Big Blackfoot Chapter of Trout Unlimited	\$4,730						
North American Wetlands Conservation Act		\$40,000					
TOTAL = \$132,180							

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life habitats.

This project involves stream relocation and restoration of the adjacent floodplain. Woody debris and rock step pools will be added. Impacts to aquatic life include colonization of the new channel. These impacts will be temporary; long term, this effort is expected to improve the overall aquatic and riparian habitat in Sauerkraut Creek, benefiting westslope cutthroat trout, bull trout, and other fish species.

2. Water quantity, quality and distribution.

No changes in drainage pattern or natural surface run-off would occur in Sauerkraut Creek as a result of the proposed project. Short-term increases in turbidity will occur during project construction. To minimize turbidity, operation of equipment in the stream channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization). A 310 permit (Montana Natural Streambed and Land Preservation Act) will be obtained from the local conservation district and the U.S. Army Corps of Engineers will be contacted for requirements to meet the federal Clean Water Act (404 permit).

5. Aesthetics.

In the short term, aesthetics would be adversely impacted during construction due to ground disturbance and the presence of heavy equipment. In the long term, the proposed project would enhance aesthetics in Sauerkraut Creek by restoring the channel and floodplain to its natural state and function. Tailing deposits would be removed, and riparian areas would be established.

7. Unique, endangered, fragile, or limited environmental resources.

Westslope cutthroat trout use Sauerkraut Creek for spawning, rearing and adult habitat. These fish, known to be genetically pure, are native to Montana and are classified as a "Species of Special Concern" because of their shrinking distribution and declining numbers. Additionally, bull trout, a species listed as threatened under the Endangered Species Act, are known to use Sauerkraut Creek for rearing on a limited basis. The intent of this project is to expand suitable habitat conditions for westslope cutthroat trout and fluvial juvenile bull trout populations, to improve water temperature, and contribute to the recovery of westslope cutthroat trout. Additionally, it will increase high quality bull trout habitat in the watershed, which is a key component of bull trout recovery. Because Sauerkraut Creek supports bull trout, the project will be included in the FWP Section 6 conservation plan with the U.S. Fish and Wildlife Service. This project will also protect the habitat of an existing western pearlshell mussel population, which is considered sensitive (S2) due to limited or potentially declining populations.

9. Historical and archeological sites.

The project area has been severely impacted by historical placer mining and includes a historical area called the Chinese wall, constructed in the 1880s during the initial mining boom. The reach of the proposed project was modified to exclude a downstream reach and maintain the historically significant mining features. Concurrence for the proposed project has been obtained from the State Historic Preservation Office.

VI. Explanation of Impacts on the Human Environment.

4. Agricultural or industrial production.

The proposed channel relocation and floodplain restoration will not change the acreage under irrigation, and the project will not adversely affect agricultural production.

7. Access to & quality of recreational activities.

Improving stream and floodplain function is expected to improve overall aquatic habitat and, as a result, would improve recruitment of fish to the stream and to the Blackfoot River.

13. Locally adopted environmental plans and goals.

This proposed project is linked to a larger habitat conservation program that entails a conservation easement that directly ties the easement to the restoration of native trout streams. This project fits into the direction of the conservation easement.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no funding is provided through the FFIP, the applicant would have to either seek additional sources of funding to complete the project, or the existing impaired section of Sauerkraut Creek would remain untouched. Risk for a major avulsion within the drainage would remain a threat. Aquatic habitat and fish populations in Sauerkraut Creek would remain diminished.

2. The Proposed Alternative

The proposed alternative intends to provide partial funding through the FFIP to rehabilitate the stream, floodplain, and hillslope processes impaired by previous placer mining operations. Stream habitat would be improved, and avulsion risk would be prevented, eliminating a potential negative impact to trout. The project is expected to benefit westslope cutthroat trout, bull trout, western pearlshell mussels, and other species that use the stream.

VIII. <u>Environmental Assessment Conclusion Section</u>

1. Is an EIS required? No.

We conclude, from this review, that the proposed activities will have an overall positive impact on the physical and human environment, and will therefore not require the extensive analysis associated with an EIS.

2. Level of public involvement.

The project application to the FFIP has been posted on the FWP webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the FFIP. The proposed project also will be reviewed by the Fish and Wildlife Commission, and <u>funding will be contingent upon their approval</u>. The EA is being distributed to all individuals and groups listed on the cover letter and will be published on the FWP webpage: <u>www.fwp.mt.gov</u>

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on August 18, 2014.

4. Person responsible for preparing the EA.

Michelle McGree, Program Officer Habitat Bureau Fisheries Division Montana Fish, Wildlife & Parks 1420 East 6th Avenue PO Box 200701 Helena, MT 59620

Telephone: (406) 444-2432 e-mail: mmcgree@mt.gov

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701 (406) 444-2432

ENVIRONMENTAL ASSESSMENT

Project Title: <u>Sauerkraut Creek Phase 2 Channel Restoration</u> Division/Bureau: Fisheries Division / Habitat Bureau (FFIP)

Description of Project: The FFIP tentatively plans to provide partial funding to a project calling for rehabilitation of the stream, floodplain, and hillslope in the Sauerkraut Creek drainage. The stream channel and riparian areas would be enhanced by relocating the existing channel and restoring the floodplain, which were heavily impacted by historical placer mining. An existing perched channel, which poses a significant threat to downstream reaches and native fish and mussel populations, would be renovated. The intent of the project is to restore and enhance aquatic habitat and to improve available habitat for westslope cutthroat trout and bull trout populations. Sauerkraut Creek is a tributary to the Blackfoot River located about 5 miles southwest of the town of Lincoln in Lewis and Clark County.

POTENTIAL IMPACTS TO THE PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites			X			X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		X
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			Х
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals			X			X
14. Transportation networks & traffic flows				X		

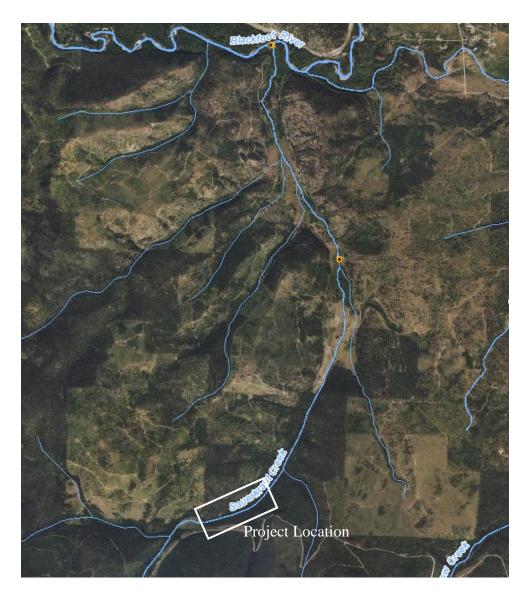
Other groups or agencies contacted or which may have overlapping jurisdiction: <u>Lewis and Clark Conservation District</u>, <u>Montana Department of Natural Resources and Conservation</u>, <u>US Fish and Wildlife Service</u>, <u>US Army Corps of Engineers</u>, <u>Montana Department of Environmental Quality</u>, State Historic Preservation Office

Individuals or groups contributing to this EA Ryen Neudecker, Big Blackfoot Chapter of Trout Unlimited

Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Michelle McGree

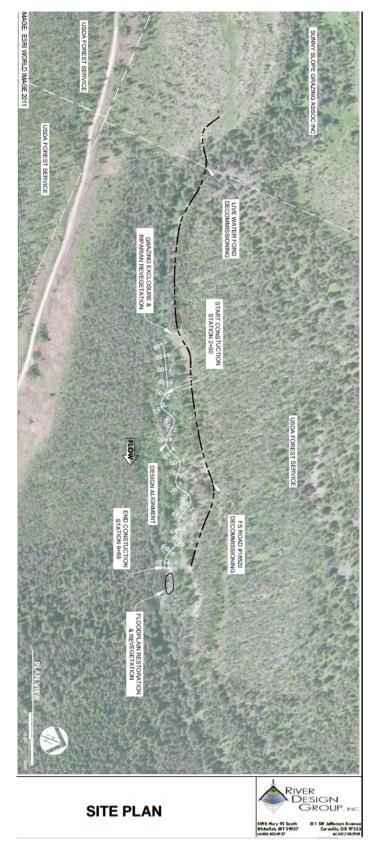
Date: July 15, 2014



ATTACHMENT 1



ATTACHMENT 2



ATTACHMENT 3